

EP 2 712 832 A3 (11)

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:

28.01.2015 Bulletin 2015/05

(43) Date of publication A2: 02.04.2014 Bulletin 2014/14

(21) Application number: 13185118.0

(22) Date of filing: 19.09.2013

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR **Designated Extension States: BA ME**

(30) Priority: 26.09.2012 JP 2012212859 17.06.2013 JP 2013126647

(71) Applicant: Nimei Seiki Co., Ltd. Toki-city, Gifu 509-5142 (JP)

(51) Int Cl.: B65H 54/48 (2006.01) B29C 33/42 (2006.01)

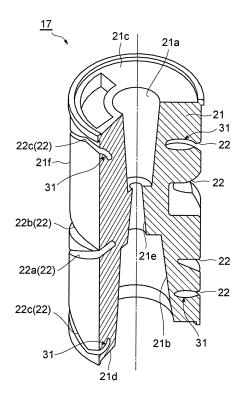
B29C 33/38 (2006.01) B29C 33/50 (2006.01)

- (72) Inventors:
 - · Hirukawa, Masao Gifu, 509-5142 (JP)
 - · Tanaka, Katsuya Gifu, 509-5142 (JP)
 - · Ichihara, Kazuki Gifu, 509-5142 (JP)
- (74) Representative: Hoffmann Eitle Patent- und Rechtsanwälte PartmbB Arabellastraße 30 81925 München (DE)

(54)Traverse drum, yarn winding device, and method of manufacturing traverse drum

(57)An undercut portion (31) is formed in a traverse groove (22) of a traverse drum (17). The undercut portion (31) has a portion whose surface on a center side of the drum main body (21) in an axial direction thereof is curved toward the center side as a position on the surface becomes deeper in a depth direction of the traverse groove (22). Because of this undercut portion (31), a yarn can be engaged with a surface of the traverse groove (22) under a suitable tension. Winding of the yarn into a package can be achieved without any problem of the yarn coming off the traverse groove (22) while being guided or the yarn not being smoothly fed from the traverse drum (17) and failing to be wound into the package.

FIG.3





EUROPEAN SEARCH REPORT

Application Number

EP 13 18 5118

	DOCUMENTS CONSID	ERED TO BE RELEVAN	IT		
Category	Citation of document with ir of relevant pass	ndication, where appropriate, ages		elevant claim	CLASSIFICATION OF THE APPLICATION (IPC)
(FR 1 219 951 A (WAL 20 May 1960 (1960-6 * figures 1,2 *	TER REINERS) 5-20)		2,4,8 5-7,9	INV. B65H54/48 B29C33/38
	-			3 7,3	B29C33/42
X	DE 11 17 461 B (SCH 16 November 1961 (1 * figures 1,3 *	WEITER AG MASCHF) 961-11-16)	1,0	1,6,8	B29C33/50
					TECHNICAL FIELDS SEARCHED (IPC) B65H B29C
					BESC
	The present search report has	•			
Place of search The Hague			Date of completion of the search 19 December 2014 Put		semier, Bart
X : part Y : part docu	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anotiment of the same category inological background	T : theory or p E : earlier patr after the fill ner D : document L : document	rinciple unde ent documen ing date cited in the a	rlying the int, but published	nvention shed on, or

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 13 18 5118

5

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

19-12-2014

10					19-12-2014
	Patent document cited in search report		Publication date	Patent family member(s)	Publication date
	FR 1219951	A	20-05-1960	NONE	
15	DE 1117461	В	16-11-1961	NONE	
20					
20					
25					
30					
25					
35					
40					
45					
50					
50					
20459					
55 PORM P0459					

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82